# Dominion Engineering, Inc.

## **Steam Generator Chemical Cleaning**

#### **Background**

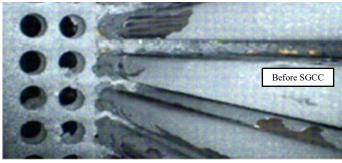
The EPRI/SGOG steam generator chemical cleaning (SGCC) process was developed in the 1980's to remove secondary side deposits and arrest outer diameter stress corrosion cracking (ODSCC) in SGs with Alloy 600 tubing. Even in SGs with more corrosion-resistant tubing material such as Alloy 690, the process is effective in mitigating tubesheet denting / cracking, high cycle fatigue failures and heat transfer efficiency loss due to secondary side deposit accumulation.

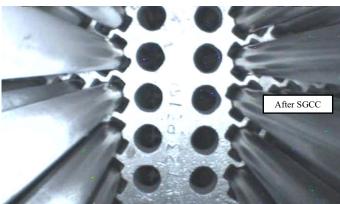
#### **Description**

DEI contributed to the original EPRI/SGOG SGCC process development, and has remained actively involved in the application of SGCC for 40 years. As an industry leader in SG integrity and performance issues, DEI first provides technical consulting to assist utilities with assessments to evaluate SG condition and to assess the future progression of heat transfer loss and tubing degradation mechanisms due to secondary side deposit accumulation. If SGCC is determined to be the best solution for maintaining SG performance and reliability, DEI provides technical consulting services to assist utilities in the qualification and successful application of SGCC processes.



SGCC equipment setup





SG chemical cleaning visual inspection results

### **DEI Expertise and Services**

- Independent consulting during SGCC process selection and qualification, including corrosion evaluations and waste / environmental studies
- Life cycle management and economic analysis to optimize timing of SG maintenance
- Autoclave testing to simulate and qualify SGCC process
- 50.59 screening evaluation support
- Venting and off-gas dispersion analysis
- Control room habitability studies
- On-site process consulting and corrosion monitoring during site implementation
- Electrochemical corrosion monitoring equipment
- SG deposit characterization



**E:** info@domeng.com **PH:** 703.657.7300